

**Notice of Allowability**

Application No.

09/489,324

Examiner

Isaac M Woo

Applicant(s)

BUTCHER, KRISTIN

Art Unit

2162

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to response filed on 12/17/2004.
2. ☒ The allowed claim(s) is/are 61-80.
3. ☐ The drawings filed on \_\_\_\_\_ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

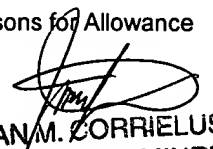
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☒ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☒ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☒ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
JEAN M. CORRIELUS  
PRIMARY EXAMINER



**DETAILED ACTION**

1. This office action is in response to the amendment filed on December 17, 2004.
2. Claims 1-60 are canceled. Claims 61-80 are presented for examination for this office action.

***Drawings***

3. The drawings filed on June 21, 2000 are acceptable subject to correction of the informalities indicated on the attached "Notice of Draftperson's Patent Drawing Review," PTO-948. In order to avoid abandonment of this application, corrected formal drawing is required in reply to the Office action. The correction will not be held in abeyance.

***Allowable Subject Matter***

4. Claims 61-80 are allowed.

***Reason For Indicating Allowable Subject Matter***

5. The following is a statement of reasons for the indication of allowable subject matter: Claims 61, 71 and 80 identify distinct feature, the computer system, method, computer program product and apparatus for representing a range of numbers by an



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optimized set of hierarchically ordered sub-ranges using wildcard entries, the range having a lowest value range number and a highest value range number, wherein each of the sub-ranges includes a lowest value sub-range number and a highest value sub-range number. The closest prior art Avargues et al (U.S. Patent No. 6, 104, 701) discloses for generating a set of sub-ranges from the range, optimizing at least one of the sub-ranges, the optimizing including at least, determining a difference position between a lowest value sub-range number and a highest value sub-range number indicating a maximal degree of optimization of the sub-range, and optimizing the sub-range based upon the difference position. The prior art does not address the computer system, method, computer program product and apparatus for determining a counting value and a magnitude value wherein the magnitude value indicates a number of wildcards used to optimize the sub-range, truncating the highest value sub-range number based upon the difference position to form a limiting value, adding a wildcard entry to the optimized set based upon the counting value and the magnitude value, incrementing the counting value, and repeating until counting value equals the limiting value or the counting value is divisible by ten. Avargues fails to suggest the claimed limitation as mentioned above in combination with other limitations of the dependent and independent claims. The claims 61-80 are hereby allowed.




***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isaac M Woo whose telephone number is (571) 272-4043. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

IMW  
March 21, 2005

  
JEAN M. CORRIELUS  
PRIMARY EXAMINER